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EXAMINER

NAQI, SHARICK

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/808,562	<b>Applicant(s)</b> UENO ET AL.	
	<b>Examiner</b> SHARICK NAQI	<b>Art Unit</b> 3769	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 8/19/2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mault et al. US Patent Number 6,513,532 (hereinafter Mault), which incorporates by reference Mault US Patent Number 6,478,736 (hereinafter Mault 736), and Abrams et al. US Patent Number 5, 673,691 (hereinafter Abrams).**

In regards to claim 1, Mault discloses an apparatus for supporting a user's behavior, comprising:

one or more processing devices (Mault figures 1 and 2);

a behavior schedule database configured to store a schedule for the user, the schedule including a date, a start time, an end time, a behavior label, and a route

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schedule, the user schedule being created based on the user's intent (Mault Fig. 5 and 7, Mault 736 column 11, lines 5-17);

at least one of one or more processing devices configured to implement an integrated behavior database generation unit (Mault column 4, lines 46-51) to generate an integrated behavior database correspondingly storing a biomedical information and a behavior information of the user (Mault 736 column 6, lines 39-45, Mault column 8, lines 6-7), the biomedical information being detected by a sensor associated with the user's body (Mault column 3, lines 46-53), the behavior information including the user's actual behavior in the past (Mault 736, column 11, lines 5-57);

at least one of one or more processing devices configured to implement a behavior rule generation unit configured to generate a behavior rule of the user by referring to the integrated behavior database, the behavior rule representing a tendency of the user's behavior in the past (Mault 736 column 11, lines 5-57);

at least one of one or more processing devices configured to implement a message notice unit to notify the user of the message (Mault 736 column 11, lines 5-57).

Mault discloses that the system analyzes the lifestyle data (diet log and activity data) to provide feedback to the user, i.e. if the data shows that the user's metabolic rate has fallen, it would be advantageous for the user to engage in enhanced levels of physical activity. Mault also discloses that based on the user's previous levels of activity (*equivalent to a behavior rule*), an exercise program can be devised for the user (Mault 736, lines 4-43).

Mault does not explicitly disclose how the exercise program is devised and therefore fails to disclose at least one of one or more processing devices configured to implement a behavior schedule reorganization unit configured to reorganize the user schedule by referring to the behavior rule, wherein at least the route schedule is reorganized, an exercise being inserted into a time segment of the reorganized route schedule; and a message generation unit configured to generate a message to urge the user to do the exercise via the reorganized route schedule by referring to the reorganized user schedule.

However Abrams, a reference in an analogous art of weight control devices, discloses an automated system that tailors an exercise program based on the user's past behavior, where the exercise program begins with minimal target exercise minutes and gradually shapes user to increase their exercise (Abrams column 4, lines 43-46, column 11, lines 50-53) and schedules the exercise according to the user's particular schedule (*equivalent to a behavior schedule reorganizing unit because as exercise minutes are increased, greater time in the user's schedule will be required for the exercise, therefore reorganizing the user's schedule, and also reorganizing the route schedule because more time will be spent in the gym*), then reminds and actively prompts the user to perform the exercise according to schedule (*equivalent to a message generation unit*) (Abrams Column 21, line 65-column 22, line 20).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Mault with Abrams' user behavior based automated exercise program generation, scheduling and reminder system (*equivalent to the*

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*claimed behavior schedule reorganizing and message generation units as explained above*) to provide an exercise program based on user behavior as desired by Mault because Abrams provides a safe flexible exercise program tailored to the abilities and needs of a wide range of users (Abrams Column 4, lines 32-35) and displays feedback to encourage, motivate and support the user towards achieving the desired weight (Abrams column 3, lines 54-56).

2. The apparatus according to claim 1, wherein the behavior information comprises a behavior database (Mault 736 column 6, lines 34-37), and a feeling description database (Mault 736, column 8, lines 30-50, column 12, lines 11-13).

3. The apparatus according to claim 2, wherein the behavior database correspondingly includes a date, a start time, an end time, a start point, an end point, a user name, a behavior label, and a route (Mault Figs. 5 and 7, Mault 736 column 9, lines 45-65).

4. The apparatus according to claim 3, wherein the feeling description database correspondingly includes a date, a start time, an end time, a user name, and a feeling description (Mault fig. 5, column 5, lines 39-43, Mault 736 column 8, lines 30-50).

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5. The apparatus according to claim 4, wherein the behavior schedule database correspondingly includes a number of steps estimated by said behavior schedule reorganization unit (Mault column 2, lines 37-40, Mault 736 column 9, lines 45-65).

6. The apparatus according to claim 5,  
wherein the biomedical information comprises a sensor database (Mault column 8, lines 6-7, memory for storage of data, Mault 736, column 12, lines 22-37), and  
wherein the sensor database correspondingly includes a date, a start time, an end time, a measurement value of the sensor at the start time, and a measurement value of the sensor at the end time (Mault column 7, lines 14-16, Mault 736, column 12, lines 22-37).

7. The apparatus according to claim 6, wherein at least one of one or more processing devices is further configured to implement said integrated behavior data generation unit (Mault column 4, lines 46-51) to merge information of the behavior database, the feeling description database (Mault 736, column 8, lines 30-50) and the behavior schedule database for the same user, the same date, the same start time and the same end time, and generate the merged information as the integrated behavior database (Mault column 9, lines 27-29, column 14, lines 8-13).

8. The apparatus according to claim 1,

wherein at least one of one or more processing devices is further configured to implement said behavior rule generation unit to extract the tendency of the user's behavior from information of the integrated behavior database, modify the extracted information as a rule having condition and result, and generate the rule as a behavior rule database (Mault column 4, lines 46-51, column 9, lines 27-29, column 14, lines 8-13, Mault 736 column 8, lines 30-50).

9. The apparatus according to claim 1, further comprising  
a relational database configured to store a conception dictionary dataset, a behavior label set, a calendar weather data set, a route data set, a location data set, and a map dataset, (Mault column 4, lines 18-23, column 9, lines 30-56) and

wherein at least one of one or more processing devices is further configured to implement said integrated behavior data generation unit to add information to the integrated behavior database by referring to each set of the relational database (Mault column 9, lines 27-29, column 14, lines 8-13).

10. The apparatus according to claim 8, wherein at least one of one or more processing devices is further configured to implement said behavior schedule reorganization unit to reorganize the route schedule so that an estimated number of steps is constantly above a target value of a number of steps (Mault column 2, lines 37-40, Mault 736 column 9, lines 45-65).



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11. The apparatus according to claim 10, further comprising  
a behavior advice (Mault 736 column 11, lines 15-18) database configured to  
store the message in correspondence with the behavior rule (Mault column 8, lines 6-7).

12. The apparatus according to claim 1, further comprising,  
at least one of one or more processing devices is further configured to implement  
an advice evaluation input unit to input an evaluation for the message from the user  
(Mault column 11, lines 27-33, Mault 736 column 11, lines 45-57), and  
an advice evaluation database configured to store the evaluation in  
correspondence with the message (Mault column 11, lines 29-46).

13. The apparatus according to claim 12, further comprising  
an exercise constraint condition rule database configured to correspondingly  
store the behavior rule and the evaluation (Mault column 11, lines 27-33), and  
wherein at least one of one or more processing devices is further configured to  
implement said message generation unit to generate a message by referring to the  
exercise constraint condition rule database (Mault column 8, lines 6-7 column 14, lines  
8-13 Mault 736 column 6, lines 34-37).

14. The apparatus according to claim 5, further comprising:

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at least one of one or more processing devices is further configured to implement a data interface unit to input the feeling description and the behavior schedule data from the user (Mault fig. 5, column 4, lines 46-51, column 7, lines 64-66).

15. The apparatus according to claim 14,

wherein said data interface unit interactively inputs a status data of the user's moving by the user's indication, and records the status data as the user's behavior in time series (Mault column 8, lines 47-65).

16. The apparatus according to claim 15,

wherein said data interface unit outputs a behavior graph of the user by using the recorded status data in time series (Mault fig. 5, column 9, lines 30-33).

17. The apparatus according to claim 13,

further comprising:

at least one of one or more processing devices is further configured to implement a database share unit to share information of the integrated behavior database and the exercise constraint condition rule database among a plurality of users (Mault column 5, lines 44-49, column 8, lines 6-7, Mault 736 column 10, lines 31-36).

18. The apparatus according to claim 6, further comprising:

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at least one of one or more processing devices is further configured to implement a location detection unit configured to detect the user's location information (Mault column 8, lines 47-54), and

wherein the integrated behavior database (Mault column 8, lines 6-7. Memory (42) for storage of data) correspondingly stores the biomedical information (Mault 736 column 6, lines 39-45), the behavior information and the location information (Mault column 8, lines 47-65).

Claims 19 and 20 are rejected on substantially the same basis as claim 1

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHARICK NAQI whose telephone number is (571)272-3041. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry M. Johnson III can be reached on 571-272-4768. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. N./

Examiner, Art Unit 3769

/Michael C. Astorino/

Primary Examiner, Art Unit 3769

December 7, 2008